Paying for Phase II

A Storm Water Management Program Update

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Georgetown v. Public Works Growth

- Population
  - 1990 => 11,414 pop.
  - 2005 => 20,000 pop. Est.
  - 2010 => 21,230 pop. Projected
  - 1990 to 2010 => 86% increase (almost doubled)
- Land Mass
  - 1990 => 5533 acres
  - 2007 => 10597 acres
  - 1990 to 2007 => 91% increase (almost doubled)
- Public Work Staff net increase = negative

Current Street Maintenance Equipment Resources

- Pickup trucks (3)
- Dump/Salt Trucks (6)
- Backhoe
- Trailer
- Loader
- Grader
- Skid Steer
- Finishing Roller
- Leaf Vac
- Sweepers (2)
- Tractor mowers (2)
- Hand power tools (saws, weedeaters, blowers, pumps)

Allows us to:

- Minor shouldering
- Pothole patching
- Minor storm drain cleaning
- Small, shallow pipe replacement
- Herbie delivery
- Leaf Collection
- Street sweeping
- Minor tree trimming
- ROW mowing

Future Street Maintenance Equipment Needs

- Pickup trucks (2 more)
- Dump/Salt Trucks (1*)
- Bulldozer
- Track Hoe
- Small Paver
- Mid weight Roller
- Asphalt crack sealing machine

* Purchase of another garbage truck could allow the conversion of an old truck for leaf service use, reducing the need for an additional Dump Truck.

Would allow us to:

- Full width patching
- Intermediate street rehab
- Intermediate to Major Drainage Maintenance
- Grading, earthwork
- Larger scale drainage improvements
- Dump Truck available year round

Other Street Maintenance Equipment Needs (sinking funds)

- O&M - replacements
  - Pickup trucks (3) = $20,000 / 5 yrs each
    - 2 due for replacement 2008
  - Dump/Salt Trucks (6) = $65,000 / 5 yrs each
    - 3 due for replacement 2008, 3 within next 3-4 yrs
  - Backhoe = $100,000 / 5 yrs
    - Due for replacement 2008
  - Mowers (2) = $30,000 / 10 yrs
    - Due for replacement 5+ yrs
  - Trailer = $25,000 / 10 yrs
    - Due for replacement 5+ yrs
  - Loader = $95,000 / 10 yrs
    - Due for replacement in 1-2 yrs
  - Grader = $120,000 / 10 yrs
    - Due for replacement in 3 yrs
  - Skid Steer = $150,000 / 10 yrs
    - Due for replacement in 3-4 yrs
  - Finishing Roller = $55,000 / 10 yrs
    - Due for replacement in 5+ yrs

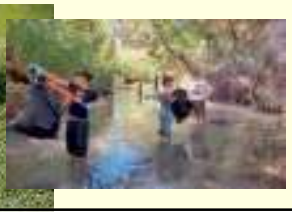
Other Street Maintenance Equipment Needs (sinking funds)

- O&M – new purchases
  - Pickup trucks (2) = $20,000 / 5 yrs each
  - Dump/Salt Trucks (1*) = $65,000 / 5 yrs each
  - Bulldozer = $90,000 / 10 yrs
  - Track Hoe = $250,000 / 10 yrs
  - Small Paver = $60,000 / 10 yrs
  - Mid weight Roller = $60,000 / 10 yrs
  - Asphalt crack sealing machine = $60,000 / 6-8 yrs

  * Purchase of another garbage truck = $115,000 / 5yrs could allow the conversion of an old truck for leaf service use, reducing the need for an additional Dump Truck.

SWM Program Needs

- Staff
  - SWM Program Manager
  - Administrative Support
  - Maintenance Crew / Operators
  - Inspector (PW, P&Z, or B.I.)
- Equipment
  - Sweepers
  - Vacuum Truck
  - Backhoe
  - Dump Truck / Trailer
  - Pick up trucks
  - Leaf Collection Equipment
- Materials
  - Pipe, Stone, Concrete, Device inserts
  - Publications, Stenciling, clean-up events
  - Computers, copies, office space
- Capital Improvements
  - Drainage Projects
  - Asset Management
  - Mapping updates
- Funding Mechanism
  - Administrative Manager



City Engineer's Role in SWMP

- SWM Oversight, Management, Guidance – No time for Production
- Other Engineering Tasks annually
  - Administration – Budgets, Personnel, Bills, Coordination
  - CIPs
    - Police Station, Fire Station, Pool, Cemetery, New Roads
    - Paving, Drainage
    - Manage consultant and the contracts
  - Short and Long Range Planning
    - Committees – BGADD, Traffic, TRC
  - Programming
    - Pavement Asset Management
    - Storm Sewer Asset Management
    - Street lights
  - Streets and Drainage O&M Management
    - Scheduling, Administration, citizen inquiries
    - Street Cut permitting

SWMP Needs

- WQL unit O&M
  - 50 units every 3mo. x 4hr./unit = 800 hrs.
- Private WQL Inspection
  - 220 units every 3mo. x 1hr./unit = 880 hrs.
- Street Sweeping (10-12 miles / day / sweeper)
  - 54 miles Curb&Gutter City Streets; 34 miles to be dedicated
  - (54+34) = 88 miles Curb and Gutter
  - 88 miles every 2 wks., 10 mo/yr = 1900 miles/ yr.
  - 1900 / 10 miles/day = 190 days/year
- Det. Basin O&M
  - 40 units every 3 mo. x 2hr./unit = 320 hrs.
- Annual S.S. Inspection
  - 237283 ft line. w/ 3405 inlets / yr x 6 inlets/hr. = 568 hrs.
- Leaf Crew
  - 3 man crew full time approx. 2 months/year
- Annual IDDE/Outfall Inspection
  - 237283 ft line x 5000 ft / hr = 47 hrs.
- Annual administration, education, programming, outreach = 1350 hr / yr avg.

SWM staffing needs

- What is full time?
  - Full time = 8hr/d x 5 d/w x 48 w/yr = 1920 hr/yr
  - Full time = 5 d/w x 48 w/yr = 240 days/year
- O&M crew = 1120 hr / yr
- SWM Manager* = 1350 hr / yr
- SWM Inspector* = 1495 hr / yr

  * Full time = 7hr/d x 5 d/w x 48 w/yr = 1680 hr/yr
- Sweep crew = 190 days / yr
- Leaf crew = 2 months/yr, 40 days/yr, or 320 hr/yr

SWM Equipment Needs (sinking funds)

- O&M
  - Pickup truck with equipment bed = $25,000 / 5 yrs
  - Vac / Jet Tanker Truck = $200,000 / 5 yrs
  - Dump Truck = $65,000 / 5 yrs
  - Backhoe = $100,000 / 5 yrs
  - Trailer = $20,000 / 10 yrs
- Leaf Brush Collection
  - Dump Truck * = $65,000 / 5 yrs

    * Purchase of another garbage truck = $115,000 / 5yrs could allow the conversion of an old truck for leaf service use, reducing the need for an additional Dump Truck.
  - Leaf Vacuum = $15,000 / 5 yrs
- Sweeping
  - 2 Sweepers = $125,000 / 5 yrs each
- Inspection
  - Pickup truck = $20,000 / 5 yrs
  - 2 Arcpad GPS units = $7,500 / 2 yrs for both

Summary of 2008+ Cost

- Street Maintenance
  - Labor (10) = $325,000 (moves 3 crew to SWM)
  - Equipment = $270,000
  - Materials = $135,000

Subtotal = $730,000

- SWM Program
  - Labor (10) = $527,000 (2 in B.I. & P&Z currently)
  - Equipment = $350,000
  - Materials/consulting = $115,000 (incl. const. & publications)
  - CIP (const./consulting) = $200,000

Subtotal = $1,192,000

Total * = $ 1,922,000 / yr

* Does not include PW mgmt., admin., fuel, mechanics, fleet maintenance, building maintenance, etc.

Historic Annual Drainage Spending

- Labor (SWM related) (3+3 for 3mos.) $107,000
- Equipment = $220,000
- Materials & Consulting = $50,000
- CIP = $118,000 ($79,000 prior to 2003)
- B.I. & P&Z = $62,000
- Total = $557,000

- Recap $557,000 up to $1,192,000

How we going to pay for it?

- Taxes
  - Based on property value, not usage
  - Based on income level, not usage
  - Subject to fluctuation and the economy
- Grants
  - Undependable
  - Low $$
  - Many programs, such as Section 319, prohibit funding SWM programs with grant $.
- Loans / Bonds
  - Delays the payment; becomes a debt snowball
- Utility / User Fees
  - Based on actual impact to stormwater
  - Acknowledges efforts to lessen impacts

Storm Water Utilities

- Fair and Equitable
- Not based on property value or income
- Based on amount of impervious area, or % of whole
- Defensible
- Based on the Equivalent Rate Unit (ERU)

ERU

- Average Single Family Residence Impervious area is the unit. eg. Assume a typical lot:

Roof Top	**1,000 sq. ft.**
porch	**200 sq. ft.**
driveway	**400 sq. ft.**
sidewalk	**100 sq. ft.**
total	**1800 sq. ft.**

- Commercial Sites - # ERUs. eg. Typical shopping center:

Roof Top	60,000 sq. ft.	
Parking lot	48,000 sq. ft.	
Total	108,000 sq. ft.	108/1.8 = 60 ERU

- Credits Program - % disc. for BMPs (eg. Water Quality Unit, Detention Pond, LID concepts)

Utility Revenue Example

- 8,000 households
- City = 10,500 acres
- 1754 acres impervious in City (includes homes, commercial, streets, etc.)
- Residential Imp. = 330 acres
- Non-Res. Imp. = 1423 acres
- Assuming 50% is roads, public, etc., results in 711 acres commercial impervious or 17200 ERUs
- 17200+8000=25,000 ERU

Utility Revenue Example cont.

$1,192,000 / year need

1192000/25000 = $48 / yr. or $4 / mo. per ERU

Typical Single Family household = $4 / mo.

Typical Commercial site = 4*60 = $240.00 / mo.*

*without any credits

Conclusion

- Permit requirements continue to increase
- Program needs continue to rise
- Cost will have to increase to keep up
- Existing funding levels are not getting it done
- Existing funding sources are not guaranteed
- Decisions need to be made to be successful
- SWAC champion efforts to make it happen

Upcoming Schedule

- Notice of Intent - July 2007
- Draft Permit Matrix – Jan 2008
- SWAC mtg. March to review annual report
- 2007 Annual Report due March 31, 2008
- 2008-2013 permit effective July 1, 2008
- Quarterly SWAC meetings
- Annual Reporting – March each year